

Ship March 14th

Work Order ID 157147

157147

Page 1

Wednesday, February 15, 2017 8:31:09 AM

Item ID: D350-591-133

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/10/2017 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: UMF Date: 17-2-15

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2946

Rev B

DSI9712

A

IIN-D350-591

H

MAR 09 2017
DAS
6
9-89

DAS
21
9-89

MAR 09 2017

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and type labels as per PPP D350-591-133 CHG004

6x
DAS
28
9-89

MAR 09 2017

110

0.00

110

Large Fab

Large Fab

Memo

0.43

Large Fab

1-Cut D2622-120 extrusion to 62.06" long as per Dwg D2946

2-Deburr

Ensure that 57.09" minimum extrusion is kept and identify to be used for D350-591-215/-216.

17-2-16 (6)

B#157147 x 6

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[illegible]

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Item ID: D350-591-133

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/10/2017 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150 QC5- Inspect part completeness to step on W/O 0.00

150

QC

Memo

0.02

Quality Control

6 11-02-28 PA

160 Chemical Conversion Coat per QSI005 4.1 0.00

160

HandFinish

Memo

0.19

Hand Finishing

x6 2017/03/01
BEB

170 QC7-Inspect Chemical Conversion Coat 0.00

170

QC

Memo

0.01

Quality Control

6 MAR 02 2017 pc

Work Order ID 157147

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Item ID: D350-591-133 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: AFT Maintenance Step, Fits LH or RH
 Start Date: 2/15/2017 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 3/10/2017 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Large Fab	0.00							
180	 Large Fab	0.38							
Large Fab	Memo								
Large Fab	Remove alodine prior to welding. Weld end cap as per Dwg D2946. Grind end cap weld flush.								
	A/R AL ROD BATCH: B131562								
190	QC10- Inspect visual per QSI004- ground welds	0.00							
190									
QC	Memo	0.00							
Quality Control									
200	QC5- Inspect part completeness to step on W/O	0.00							
200									
QC	Memo	0.02							
Quality Control									

6x SD 2017/03/06
 6x CC 17-3-6

⑥ 11-03-07 DAS 9 9-89

⑥ 11-03-07 DAS 9 9-89

Work Order ID 157147

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Item ID: D350-591-133 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: AFT Maintenance Step, Fits LH or RH
 Start Date: 2/15/2017 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 3/10/2017 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	Chemical Conversion Coat per QSI005 4.1	0.00							
210	HandFinish	0.11				(X6)	✓	2017/03/08	BEB
Hand Finishing	Memo								
220	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
220	Powdercoat	0.07						6 of 1703-8	2017/03/08
Powder Coating	Memo								
	START TIME: 11:40								
	OVEN TEMPERATURE: 320°								
	FINISH TIME: 12:10								
230	Wing Walk as per dwg QSI005 4.4 Batch 1136886	0.00							
230	HandFinish	0.19				(X6)	✓	2017/03/08	BEB
Hand Finishing	Memo								

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Item ID: D350-591-133

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N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/10/2017 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270		0.00							
270	Packaging					6		DAS 28 9-89	DAS 27 9-89
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-591-133 Location: FG038								MAR 09 2017
280		0.00							
280	QC21- Final Inspection - Work Order Release								
QC	Memo	0.10						DAS 21 9-89	MAR 09 2017
Quality Control									

MF
17-3-9

Picklist Print

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Page 1

Work Order ID: 157147

157147

Parent Item: D350-591-133

D350-591-133

Parent Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017

Required Date: 3/10/2017

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP Rev:B05.10.14Modified step 10KJ/EC

IPP Rev:C06.07.19D2946 @ rev.b EC

IPP REV:D

14.12.17 ADD DSI9712-011 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN4-11A

Purchased

No

250

Each

95.0000

4
**

24

DAS
6
9-89

MAR 09 2017
DAS
27
9-89

AN4-11A
BOLT

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

20

120731

20

ST344

75

M136263

75

24

AN4-16A

Purchased

No

250

Each

209.0000

8
**

48

MAR 09 2017

AN4-16A
Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

5

121541

5

over003

100

M136740

100

ST343

104

M136648

104

48

AN4-7A

Purchased

No

250

Each

37.0000

2
**

12

MAR 09 2017
DAS
6
9-89

AN4-7A
Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

ST345

37

m136192

37

12

Picklist Print

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Page 2

Work Order ID: 157147

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Parent Item: D350-591-133

D350-591-133

Parent Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017

Required Date: 3/10/2017

Start Qty: 6.00

Required Qty: 6.00

D2230-1 Manufactured No

250 Each

78.0000

4

24

DAS

6

9-89

MAR 09 2017

DAS

27

9-89

D2230-1

Mounting Lug

DAS

28

9-89

Location

Loc Qty

Loc Code

FG

4

150062

2

84136

2

ST521

24

115306

1

151611

23

ST525A

50

153924

50

D2230-3 Manufactured No

250 Each

206.0000

4

24

DAS

6

9-89

MAR 09 2017

DAS

27

9-89

D2230-3

Mounting Lug

DAS

28

9-89

Location

Loc Qty

Loc Code

FG

6

109344

4

89045

2

ST321

80

154877

80

ST521

120

151426

76

153925

44

D2622-120C Manufactured No

110 Each

63.0000

0.52

4

DAS

6

9-89

MAR 09 2017

MAR 09 2017

D2622-120C

Step Extrusion

Location

Loc Qty

Loc Code

WA003

63

150070

3

152316

60

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Shop Packet Print

Page 2

Picklist Print

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Page 3

Work Order ID: 157147

157147

Parent Item: D350-591-133

D350-591-133

Parent Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017

Required Date: 3/10/2017

Start Qty: 6.00

Required Qty: 6.00

D2732 Manufactured No

250 f

338.6330 2 12

**

MAR 09 2017

D2732

Rubber Cushion (\$per foot)

DAS
6
9-89

Location

Loc Qty

Loc Code

ST412

338.6330494

117118

5E-10

150042

338.633049

134138

cut (8) at 3.00"

D2734 Manufactured No

130 Each

53.0000 2 12

**

BE 17-02-16

D2734

Step End Plate

Location

Loc Qty

Loc Code

WA003

53

149392

53

12

D2944 Manufactured No

130 Each

16.0000 2 12

**

BE 17-02-16

D2944

Step Mounting Plate

Location

Loc Qty

Loc Code

WA003

16

152882

12

12

D2945 Manufactured No

250 Each

15.0000 1 6

**

MAR 09 2017

D2945

Mounting Plate

Location

Loc Qty

Loc Code

ST013

2

142830

2

ST014

13

145617

13

6

D.DAS
16
DAS
27
9-89

DAS
28
9-89

Picklist Print

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Work Order ID: 157147

157147

Parent Item: D350-591-133

D350-591-133

Parent Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017

Required Date: 3/10/2017

Start Qty: 6.00

Required Qty: 6.00

D3338-1

Manufactured No

270

Each

6.0000

1 6

**

D3338-1

Mounting Lug

DAS
28
9-89LocationLoc QtyLoc Code

ST527

6

155193

6

MS21042L4

Purchased

No

250

Each

2,472.000

14 84

**

MS21042L4

Nut

LocationLoc QtyLoc Code

FP001

18

m133363

18

GA

187

m135058

187

OVER007

1500

m136450

500

m136838

1000

ST303

767

m136648

767

NAS1149D0463J

Purchased

No

250

Each

3,032.000

14 84

**

NAS1149D0463J

Washer

DAS
28
9-89LocationLoc QtyLoc Code

GA

80

M134508

13

M135056

67

ST260a

1000

M136838

1000

ST263

1952

M136665

1952

Wednesday, February 15, 2017 8:31:08 AM

Shop Packet Print

Page 4

DART

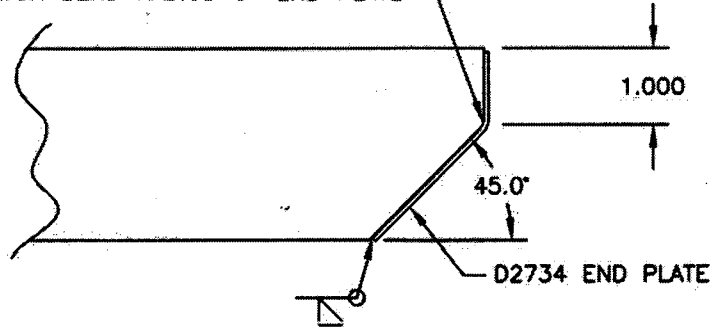
D2946 STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY
D2946	Step Assembly	X
D2622-63	STEP EXTRUSION*	1
D2734	END PLATE	2
D2944	STEP MOUNTING PLATE	2

*cut per drawing

NOTE: ALL WELDS SHALL BE
100% VISUALLY
INSPECTED BY A
QUALIFIED INSPECTOR
PER DART QSI 004

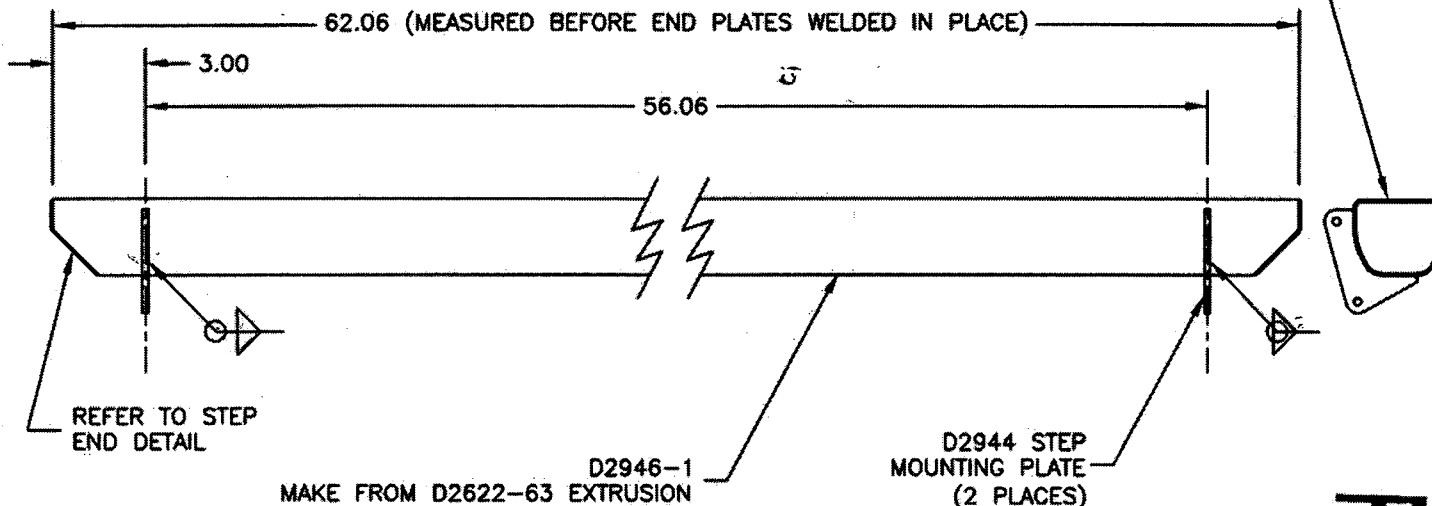
ROUND CORNER OF EXTRUSION TO
MATCH BEND RADIUS OF END PLATE



TYPICAL STEP END DETAIL
NOT TO SCALE

mk
±157147

APPLY BLACK ANTI-SKID
ON TOP SURFACE TO
BOTTOM OF TOP RADIUS



D2946-041 STEP ASSEMBLY

D2946 STEP ASSEMBLY

- 1) MAKE FROM D2622 STEP EXTRUSION
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ENTIRE ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DESIGN	DRAWN BY	DART AEROSPACE LTD
CP	PH	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
<i>[Signature]</i>	<i>[Signature]</i>	D2946
DATE	TITLE	SCALE
05.11.14	STEP ASSEMBLY	1:6
A	99.12.13	NEW ISSUE
B	05.11.14	UPDATE FINISHING NOTE

RELEASED
05/11/28

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 REV. 3
REF TCCA STC: SH92-6
REF FAA STC: SH967NE

1.0 Purpose

It has come to DART's attention that it may be difficult to fasten the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Installations to the forward crosstube due to variations between crosstubes. For this reason, DART is adding the D3338-1 Mounting Lug to the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 004 and later.

For D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 003 and earlier, DSI 9712-011 Mounting Lug Kit can be procured from DART. The kit contains all parts to upgrade a single step kit.

2.0 Installation

- 2.1 It is acceptable to install the D3338-1 Mounting Lug in lieu of the D2230-1 Mounting Lug as required to reduce the gap between step and the forward crosstube in accordance with the figures of this service instruction.
- 2.2 The height to set up the D350-591-133 Maintenance Step has been revised from 7.0in to 6.0in $\pm$ 1.0in to provide more flexibility. See sheet 2 of this service instruction.
- 2.3 In all other respects, install the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps in accordance with Section 3.1 of Installation Instructions D350-591 or Section 32.1 of Instructions for Continued Airworthiness ICA-D350-591.

3.0 Parts List Change

The following additional part is provided with D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps at CHG 004:

Qty -133	Qty -213	Qty -214	Part Number	Description
X			D350-591-133	Heli-Access-Step™, Aft Maintenance Step
	X		D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
		X	D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
1	1	1	D3338-1	MOUNTING LUG (ADD)

4.0 DSI 9712-011 Mounting Lug Kit Parts List

For existing D350-591-133 Aft Maintenance Steps and D350-591-213/-214 Heli-Access-Steps at CHG 003 or earlier, one DSI 9712-011 kit upgrades one step installation:

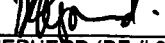
Qty -011	Part Number	Description
X	DSI 9712-011	Mounting Lug Kit
1	D3338-1	MOUNTING LUG

5.0 Weight and Balance

There is a negligible weight change associated with this modification.

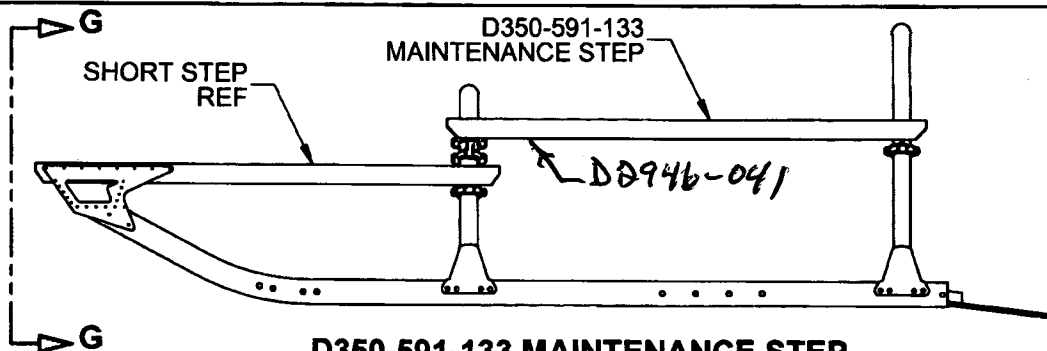
CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

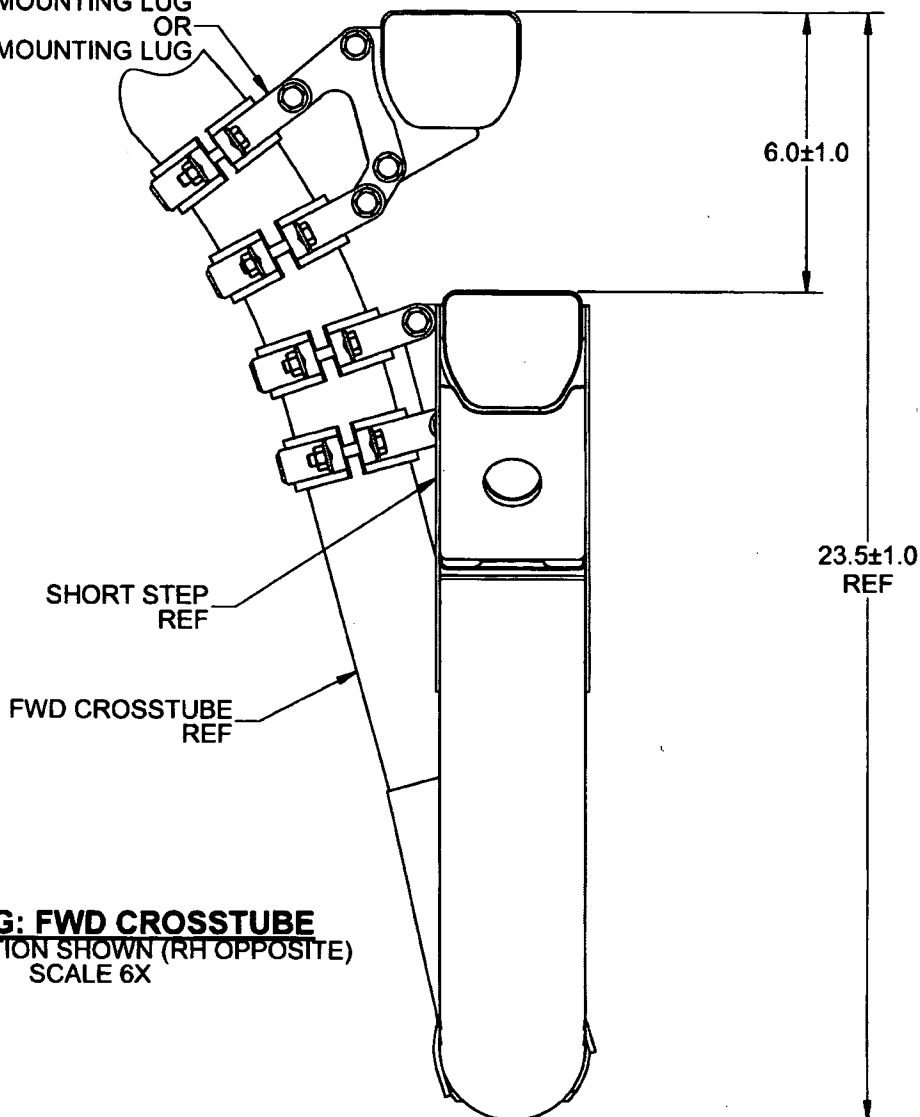
DATE: 14.12.04
CERT. NO.: SH92-6
ISSUE NO.: 11

A	NEW ISSUE	MB	14.10.22
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9712	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		INSTALLATION OPTION	NTS
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D350-591-133 MAINTENANCE STEP
LH INSTALLATION SHOWN (RH OPPOSITE)

D2230-1 MOUNTING LUG
OR
D3338-1 MOUNTING LUG



VIEW G-G: FWD CROSSTUBE
LH INSTALLATION SHOWN (RH OPPOSITE)
SCALE 6X

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

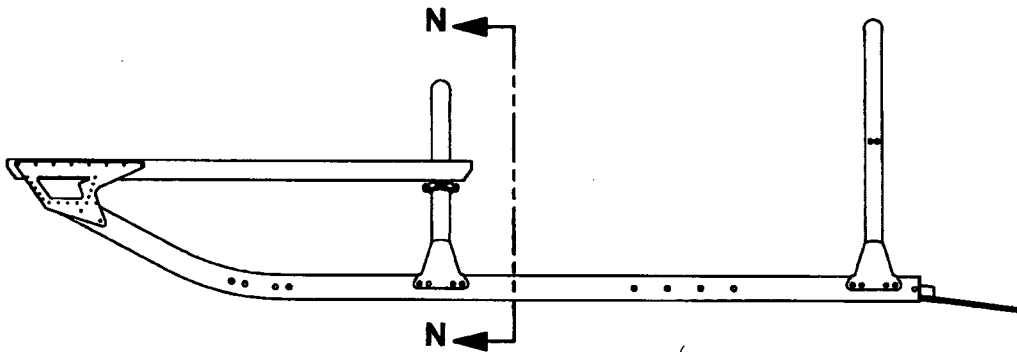
APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 14.12.04
CERT. NO.: SH92-6
ISSUE NO.: 11

REF. FIGURE 11 / 32-11 of D350-591 / ICA-D350-591
Maintenance Step

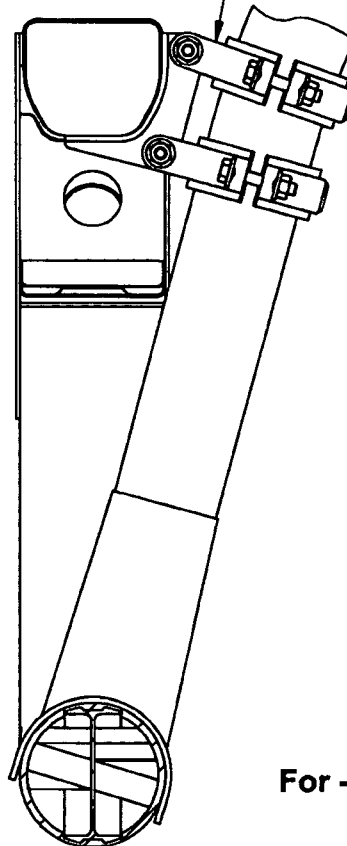
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	DSI 9712	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALLATION OPTION	NTS
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REF. FIGURE 13 / 32-13 of D350-591 / ICA-D350-591

D350-591-213 Heli-Access-Step, Short Step - High Skid, LH (shown)
D350-591-214 Heli-Access-Step, Short Step - High Skid, RH (opposite)

D2230-1 MOUNTING LUG
OR
D3338-1 MOUNTING LUG



SECTION N-N
For -213/-214 Steps only
SCALE 6X

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 14.12.04
CERT. NO.: SH92-6
ISSUE NO.: 11

REF. FIGURE 19 / 32-19 of D350-591 / ICA-D350-591
Crosstube Attachment

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	DSI 9712	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALLATION OPTION	NTS
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DQA: AW Date: 2017-07-10QA Closed: RAM Date: JUL 05 2017

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: <u>157147</u> Part No. <u>D350-591-133</u> NCR No. <u>17-6517</u>	DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☒ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐		
Date: <u>17/3/6</u>	Step #: <u>180</u>	QTY Effective: <u>6</u>	MRB (QSI042) Approval DAS <u>12</u> 9-89 17/3/6	
Description Work Order Deviation		Disposition <u>CIR17-1035</u>		
No vent hole for welding Pinet B134134 → 6x		Acceptable to drill vent hole: φ0.129, CSK φ0.225 x 100", 2.00" from step end. Plug with MS20601AD462 rivet after welding & prior to finish. Ref. DZ724 Rev.D SECTION A-A		Completed By <u>DC</u> <u>2017/03/06</u> Lead hand / Supervisor Approval Verification <u>CPL</u> <u>17.3.6</u> QC / QA Coordinator DAS Approval <u>9</u> <u>17.03.06</u> 9-89
Root Cause Environment ☐ Design ☐ Doc/Data ☒ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ ☒ Fit/Function Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER: ☐				

Work Order ID 157147

Thursday, March 09, 2017 7:30:36 AM

157147

Page 1

Item ID: D350-591-133

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AFT Maintenance Step, Fits LH or RH

Start Date: 2/15/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 3/10/2017 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D2946	Rev B
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DSI9712	A
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IIN-D350-591	H
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DAS
21
9-89

MAR 09 2017

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and type labels as per PPP D350-591-133 CHG004

110

Large Fab

0.00

110

Large Fab

Memo

0.43

Large Fab

1-Cut D2622-120 extrusion to 62.06" long as per Dwg D2946

2-Deburr

****Ensure that 57.09" minimum extrusion is kept and identify to be used for
D350-591-215/-216.****

5.0 PARTS LIST

Qty -117A	Qty -119	Qty -133	Part Number	Description
X			D350-591-117A	<i>Heli-Access-Step</i> ™, Pre-Flight Step
	X		D350-591-119	<i>Heli-Access-Step</i> ™, Long Step - Low Skid
		X	D350-591-133	<i>Heli-Access-Step</i> ™, Aft Maintenance Step
	1		D2355	STEP ASSEMBLY (LOW-LONG)
		1	D2946-041	STEP ASSEMBLY (MAINTENANCE)
2	2		D2171	CLAMP
2	2		D2182B035	CUSHION
		4	D2230-1	MOUNTING LUG
		4	D2230-3	MOUNTING LUG
4	4		D2274	RADIUS BLOCK
1			D2362-041	SUPPORT BRACKET
	1		D2362-3	SUPPORT BRACKET
		1	D2945	MOUNTING PLATE
1	1		D3595-200-300	CUSHION
		8	D2732-030	CUSHION
	2		AN3-37A	BOLT
		2	AN4-7A	BOLT
		4	AN4-11A	BOLT
		8	AN4-16A	BOLT
	4		AN4-21A	BOLT
4	1		AN4-22A	BOLT
	4		NAS1149D0363J	WASHER (AN960JD10)
4	6	14	NAS1149D0463J	WASHER (AN960JD416)
	2		MS21042L3	NUT
4	5	14	MS21042L4	NUT

Qty -121	Qty -122	Qty -123	Qty -124	Part Number	Description
X				D350-591-121	<i>Heli-Access-Step</i> ™, Short Step - High Skid, LH
	X			D350-591-122	<i>Heli-Access-Step</i> ™, Short Step - High Skid, RH
		X		D350-591-123	<i>Heli-Access-Step</i> ™, Short Step - Low Skid, LH
			X	D350-591-124	<i>Heli-Access-Step</i> ™, Short Step - Low Skid, RH
1				D2351-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1			D2351-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1		D2356-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1	D2356-042	STEP ASSEMBLY (LOW-SHORT, RH)
1	1	1	1	D2230-1	MOUNTING LUG
1	1	1	1	D2230-3	MOUNTING LUG
2	2	2	2	D2732-030	CUSHION
2	2	2	2	AN3-37A	BOLT
1	1	1	1	AN4-13A	BOLT
2	2	2	2	AN4-16A	BOLT
4	4	4	4	NAS1149D0363J	WASHER (AN960JD10)
6	6	6	6	NAS1149D0463J	WASHER (AN960JD416)
2	2	2	2	MS21042L3	NUT
3	3	3	3	MS21042L4	NUT

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-591 REV. 3
REF TCCA STC: SH92-6
REF FAA STC: SH967NE

1.0 Purpose

It has come to DART's attention that it may be difficult to fasten the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Installations to the forward crosstube due to variations between crosstubes. For this reason, DART is adding the D3338-1 Mounting Lug to the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 004 and later.

For D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Step Kits at CHG 003 and earlier, DSI 9712-011 Mounting Lug Kit can be procured from DART. The kit contains all parts to upgrade a single step kit.

2.0 Installation

- 2.1 It is acceptable to install the D3338-1 Mounting Lug in lieu of the D2230-1 Mounting Lug as required to reduce the gap between step and the forward crosstube in accordance with the figures of this service instruction.
- 2.2 The height to set up the D350-591-133 Maintenance Step has been revised from 7.0in to 6.0in $\pm$ 1.0in to provide more flexibility. See sheet 2 of this service instruction.
- 2.3 In all other respects, install the D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps in accordance with Section 3.1 of Installation Instructions D350-591 or Section 32.1 of Instructions for Continued Airworthiness ICA-D350-591.

3.0 Parts List Change

The following additional part is provided with D350-591-133 Aft Maintenance Step and D350-591-213/-214 Heli-Access-Steps at CHG 004:

Qty -133	Qty -213	Qty -214	Part Number	Description
X			D350-591-133	Heli-Access-Step™, Aft Maintenance Step
	X		D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
		X	D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
1	1	1	D3338-1	MOUNTING LUG (ADD)

4.0 DSI 9712-011 Mounting Lug Kit Parts List

For existing D350-591-133 Aft Maintenance Steps and D350-591-213/-214 Heli-Access-Steps at CHG 003 or earlier, one DSI 9712-011 kit upgrades one step installation:

Qty -011	Part Number	Description
X	DSI 9712-011	Mounting Lug Kit
1	D3338-1	MOUNTING LUG

5.0 Weight and Balance

There is a negligible weight change associated with this modification.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 14.12.04
CERT. NO.: SH92-6
ISSUE NO.: 11

A	NEW ISSUE	MB	14.10.22
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9712	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		INSTALLATION OPTION	NTS
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